# The Lauxaniidae (Diptera) described by C. F. Fallén with description of a misidentified species of Homoneura van der Wulp

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> C. F. Fallén described 15 species of Lauxaniidae, the types of 13 could be studied in the collection of Fallén in the Swedish Museum of Natural History, Stockholm and one type is located in the collection of Zetterstedt in the Zoological Museum Lund. The type of Sapromyza multipunctata was not found. Lectotypes are fixed for 12 species. Homoneura subnotata Papp is a new junior synonym of Homoneura notata (Fallén). Homoneura notata auctt. nec Fallén is now called Homoneura dilecta (Rondani, 1868). Homoneura interstincta (Fallén) has been misidentified in the past. It is fully redescribed and illustrated. *Homoneura mediospinosa* sp. n. (= H. interstincta auctt. nec Fallén) is described and illustrated. Sapromyza pallida Fallén is unrecognizable, because the only existing syntype, belonging to the Lyciella illota group, cannot be properly identified.

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#### Introduction

The Lauxaniidae are a rather large and diverse family of around 1800 described species, but with only about 160 species known in Europe. Most European species are uniformly yellow, differences between them are often small and identification is safely possible only by the study of the terminalia. On the other hand, the students of Lauxaniidae of Europe prior to about 1935 usually described the species, as it was the spirit of the time, very briefly and mentioned only simple external characters. It is therefore not surprising that the first revisions based on type specimens (e. g., Papp 1978, 1981, 1984a) revealed that many old species had to be synonymized and others were misidentified.

During a stay at the Swedish Natural History Museum in Stockholm in August 2001 I had the opportunity to study the very important collection of Carl Fredrik Fallén (1764-1830). Apparently, the Lauxaniidae of his collection have not been revised in the past 100 years, because still only the

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original labels of Fallén were present at the specimens and no publication referring to this collection is known.

C. F. Fallén may be considered to be the first Scandinavian Dipterist. His entomological career and the fate of his collection are reviewed by Michelsen (1983), Pont (1984) and Evenhuis (1997) and do not need to be repeated here. It should only be noted that Fallén himself collected mostly in the province of Skåne where he used to live. Accordingly, I have assumed that, in the case that he does not give informations as to collector or locality in the descriptions, he collected the specimens himself in the Skåne province. Another important point concerns the collections of J. W. Zetterstedt in the Zoological Museum of Lund: Zetterstedt herited the collection of Fallén and kept some specimens of Fallén's collection in his own before transferring the entire collection to Stockholm. Therefore, it became necessary to study few specimens from the various collections of Zetterstedt.

The collection of C. F. Fallén is kept separately in the entomological collection of the Swedish Natural History Museum Stockholm. It was transferred in the past years from the original boxes into drawers of the unit-tray system, with each tray containing one nominal species. All original labels have been transferred. The condition of the collection is remarkably good taking into account the age and the type of preservation in the 19th and the beginning of the 20th century. Most specimens are still in a very good state of preservation, with strong, natural colours, and only little verdegree. Some specimens are covered by debris which usually does not obscure the characters. They are directly pinned dorso-ventrally with rather strong pins, usually in the posterior half of the mesonotum. Therefore, some setae and the microstructure on this part of the body are often not visible. As it was common in this period, the specimens are only rudimentarily labelled. Usually only one specimen of each sex of each species carries an identification label, and the other specimens are unlabelled. In few cases a locality label is added. This insufficient system of labelling makes it difficult to identify unambiguously type specimens or to recognize later additions or re-arrangements by Fallén, Zetterstedt or a subsequent curator. For this reason I have decided to select whenever possible lectotypes among those specimens which carry identification labels in Fallén's handwriting. Exceptions of this general rule are extensively discussed below. In accordance with the ICZN it is expressed here that lectotypes are designated in order to fix unambiguously the status of the species.

In his various works about Swedish Diptera, C. F. Fallén described altogether 15 species which are now assigned to the Lauxaniidae. The species were placed by him in the genera *Lauxania* Latreille and *Sapromyza* Fallén, and one species was published as *Heteroneura* Fallén. Thirteen species were published in 1820 in the "Ortalides Sveciae", 1 species in the "Agromyzides Svecidae" (1823) and 1 species in the "Supplementum Dipterorum Sveciae" of 1826. His species of *Lauxania* and *Sapromyza* are all stored in box nr. 22, except for *Sapromyza interstincta* which is in box nr. 23. The only Lauxaniidae of his genus *Heteroneura*, *H. muscaria*, is kept in box nr. 25a.

#### Material

The following collections form the base of the present study:

- CAS = California Academy of Sciences, San Francisco (USA)
- HNHM = Hungarian Natural History Museum, Budapest (Hungary)
- MHNG = Muséum d'histoire naturelle, Genève (Switzerland)
- MSF = Museo di Storia Naturale "La Specola", Firenze (Italy)
- NRS = Naturhistoriska Riksmuseet, Stockholm (Sweden)
- ZML = Zoological Museum Lund (Sweden)
- ZMUC = Zoological Museum University Copenhagen (Danmark)
- CCK = private collection Ch. Kassebeer, Kiel (Germany)
- CGB = private collection G. Bächli, Dietikon (Switzerland)
- CBM = private collection of the author

#### Results

The names are listed in alphabetical order. The format of the catalogue is: type designation, studied material and identity of the species. References to further informations (descriptions, illustrations, keys, biology) are summarized in the literature section. Terminology of morphological structures follows Merz & Haenni (2000).

*aenea* Fallén, 1820: 28 (*Lauxania*). LECTOTYPE or (here designated), SWEDEN, Esperöd (NRS). [examined]

*Material.* – Described from an unspecified number of both sexes from ,,in fruticibus pratorum Esperöd, in copula deprehensa". There are 11 specimens in the Fallén collection (NRS) under this name which are all considered to be syntypes. One male bears the label ,,L. aenea  $\sigma$ " in Fallén's handwriting. It is in good condition (body slightly covered with debris, right posterior frontoorbital seta missing). I have labelled it and designate it herewith as lectotype of *Lauxania aenea* Fallén. A second specimen is labelled in Fallén's handwriting as ,,L. aenea  $\varphi$ ", but it is a male. The other  $6\sigma\sigma$  and  $3\varphi\varphi$  are unlabelled. They are all paralectotypes and have been labelled accordingly.

*Identity.* – The lectotype as well as  $6^{\circ\circ}$  and  $3^{\circ}_{\circ}$  belong to a species of *Calliopum* in the current interpretation. The present lectotype designation preserves the long-standing usage of the name *aenea* for this common and widespread species. One male belongs to the superficially very similar *Calliopum simillimum* (Collin, 1933) which differs from *C. aeneum* only in the terminalia of both sexes.

*Literature.* – Collin 1933 (illustration of male terminalia), Collin 1948 (key), Papp 1979 (habitus drawing, key), Remm & Elberg 1979 (illustrations of male and female terminalia), Shatalkin 2000 (key, illustrations of male and female terminalia).

### *albiceps* Fallén, 1820: 33 (*Sapromyza*). LECTO-TYPE ♂ (here designated), SWEDEN, Esperöd (NRS). [examined]

*Material.* – Described from an unspecified number of both sexes from "in fenestris Esperöd capta". There are two pins in the collection of Fallén (NRS), but only one pin carries also a specimen. It is labelled "S. albiceps  $\bigcirc$ " in Fallén's handwriting. Its condition is bad (abdomen missing, head squashed, both postpedicels and mouthparts absent). I am designating it as lectotype of *Sapromyza albiceps* Fallén and I have labelled it accordingly. There is only a label on the otherwise empty pin: "S. albiceps  $\bigcirc$ " in Fallén's handwriting.

*Identity.* – The lectotype male is characterized by the ivory-yellow frons with the contrasting black ocellar triangle, the entirely transparent wing, the presence of only one fronto-orbital seta and 0+3 dorsocentral setae of which the anteriormost is inserted almost on line of suture. This combination of characters in unique in Western Palaearctic Lauxaniidae and agrees with the long-standing usage of this name for a species which is currently placed in *Sapromyza*. It exhibits a strong sexual dimorphism. The female has the ordinary yellow frons and 2 fronto-orbital setae. Because of the unusal colouration and chaetotaxy of the frons, a new subgenus Paralauxania Hendel, 1908 of Sapromyza, was erected for the male of this species.

*Literature.* – Collin 1948 (description, key), Papp 1979 (key, illustration male head), Remm & Elberg 1979 (illustrations male terminalia), Shatalkin 2000 (key).

*decempunctata* Fallén, 1820: 30 (*Sapromyza*). LECTOTYPE  $\circ$  (here designated), SWEDEN, Esperöd, by present restriction (NRS). [examined]

*Material.* – Described from an unspecified number of both sexes from "in fruticibus Scaniae & in horto Esperöd valde frequens". The collection of Fallén (NRS) holds 10 specimens under this name. One male is labelled "S. 10punctata  $\bigcirc$ " in Fallén's handwriting. Its condition is very good (only right arista, last two tarsal segments on right fore leg and last two tarsal segments on right hind leg missing). It is selected and labelled here as lectotype of *Sapromyza decempunctata* Fallén. One

paralectotype female is labelled "S. 10punctata Q" in Fallén's handwriting. The other 20° and 6QQ are unlabelled. I have labelled them as paralectotypes.

*Identity.* – The lectotype and all paralectotypes are conspecific, and *S. decempunctata* is the valid name of a species of *Lyciella* Collin, as currently understood.

*Literature.* – Czerny 1932 (key, description), Papp 1979 (key, illustration wing), Remm & Elberg 1979 (illustrations male and female terminalia), Shatalkin 2000 (key, illustration wing).

*fasciata* Fallén, 1826: 15 (*Lauxania*). HOLO-TYPE q, SWEDEN, Skåne, Esperöd, near Stenshufvud (ZML). [examined]

*Material.* – Described from one Q from "Ad Esperöd Scan. prope Stenshufvud, mense Aug. 1826 unicum individuum legit D. C. F. Kjellberg". There is no specimen under this name in the NRS. But 3 specimens could be traced by R. Danielsson in the Diptera Scandinaviae collection of Zetterstedt in the ZML. One female bears the label "Lauxania fasciata Q, Fall. Suppl". The name is written in Fallén's handwriting, the reference to the publication was apparently added by another person (Zetterstedt?). I consider this specimen to be the holotype of *Lauxania fasciata*. A male with the label "Mus. The fallén's handwriting) and an unlabelled female are believed to be added later to the collection and do not have type status.

Identity. – As currently interpreted, this is a valid species of the *Minettia fasciata* species group, which includes also *M. cataracta* (Pandellé, 1902), *M. czernyi* Freidberg & Yarom, 1990, *M. luteofrontata* (Becker, 1895), *M. nemorosa* Robineau-Desvoidy, 1830, *M. rivosa* (Meigen, 1826), *M. subvittata* (Loew, 1847) and *M. tabidiventris* (Rondani, 1877). Because of the difficult synonymy and interpretation of these species, a separate study has been carried out and is presented elsewhere (Merz in press).

*Literature.* – Merz (in press) (description, key, illustrations, synonymy).

*interstincta* Fallén, 1820: 33 (*Sapromyza*). LEC-TOTYPE Q (here designated), SWEDEN, Skåne (NRS). [examined]

*Material.* – Described from an unspecified number of specimens of both sexes from "in hortis Scaniae minus frequens". There are 7 specimens, all females, in the collection of Fallén (NRS) which are all syntypes. One female with the label "S. interstincta  $\sigma$ " in Fallén's handwriting is here designated and labelled as lectotype



Figures 1-8. *Homoneura interstincta* (Fallén) (1, 3, 5, 7) and *H. mediospinosa* sp. n. (2, 4, 6, 8). 1-2, head in lateral view; 3-4, wing; 5-6, wing tip; 7-8, fore femur in anterior view.

of *Sapromyza interstincta* Fallén. Its condition is rather bad (both postpedicels absent; both ocellar setae broken near base; both left fronto-orbital setae absent; frons above lunule sunken; both posteriormost dorsocentral setae absent). Fallén obviously missexed the specimen; the genital segments are visible and show that it is a female. Of the other 6 females, all paralectotypes, one specimen is labelled "S. interstincta q" in Fallén's hand-writing, another specimen "Sandhammar (frequens?)", and the remaining 4 specimens are unlabelled.

*Identity.* – The lectotype and 5 paralectotypes belong to the same valid species of *Homoneura*. As it has been misidentified by all authors in the past it is fully redescribed below. The specimen from Sandhammar, whose thorax is rather densely covered with debris and mould, has a rather square head in profile with wide gena, and probably very long medial acrostichal setulae. It belongs to *Homoneura modesta* (Loew).

# Redescription of *Homoneura interstincta* (Fallén)

(Figs 1, 3, 5, 7, 9-15, 21-23)

*Diagnosis.* – Yellow species of *Homoneura* with unusual set of characters: row of black spinules on costa does not reach R4+5 (Fig. 5), and only a short and rather irregular row of 4-7 black spinules anteroventrally on fore femur in apical third which form a rather wide-set ctenidium (Fig. 7). Further diagnostic characters are the depression in anterior half of frons, very short rays on the arista (Fig. 1), 0+3 dorsocentral setae, 4 rows of almost similarly short acrostichal setulae, slightly infuscated crossveins (Fig. 3) and characteristic male terminalia with the paired sternite 5 (Fig. 9), the shovel-like medial surstylus and the elongate, pointed gonites (Figs 11-13).

*Description.* – Entirely yellow species of 2.35-3.06 mm wing length in males and 2.54-3.25 mm in females (lectotype: 3.01 mm).

Head (Fig. 1): In profile almost 1.5 times as high as wide, gena about one third as high as eye; fronto-facial angle about 130°; face in ventral half distinctly bulged; frons flat, in anterior half medially with distinct depression, and with black setulae; occiput medially slightly concave; head mat yellow, but fronto-orbital plates dorsally indistinctly shining and parafacial and occipital foramen whitish microtrichose; postpedicel about 1.5 times as long as wide; arista with very short rays which are at most as long as basal diameter of arista; chaetotaxy as usual for the genus, all setae black; ocellar seta long and strong, reaching anterior the anterior fronto-orbital seta; one more or less regular row of setulae posterior of the row of postocular setae.

Thorax: throughout mat yellow, but slightly shining under certain angles; mesonotum without stripes; 0+3 dorsocentral setae, the anteriormost seta almost on suture; 4 more or less regular rows of acrostichal setulae which have all about the same length; proepisternum with a weak to strong seta; prosternum bare; other chaetotaxy as usual in the genus.

Legs: yellow including the last tarsal segment; ctenidium on fore femur (Fig. 7) forming a row of 4-7 rather wide-set black setulae anteroventrally in distal third; hind femur posterodorsally with a subapical seta; other characters as usual for the genus.

Wing (Figs 2 & 5): row of black spinose setulae on costa ending at about two third of the sector between R2+3 and R4+5; both crossveins weakly, but still distinctly infuscated; in older specimens tip of veins R2+3, R4+5 and M1+2 with traces of infuscation; other characters as in genus.

Abdomen: entirely subshining yellow; setae and setulae on tergites and sternites not conspicuously strong.

Male terminalia (Figs 9-15): last pregenital sternite (= sternite 5) (Fig. 9) forming two laterally enlarged sclerites; protandrium (Fig. 10) open ventrally, without sclerotized connection to sternite 5; epandrium (Figs 11-13) narrow and elongate in lateral view; lateral surstylus continuous with epandrium, externally not separable from epandrium; medially recognizable by a narrow line at the articulation of the medial surstylus; medial surstylus parallel-sided, apically hooked, articulating with epandrium by a small sclerotized plate (Fig. 11); cercus small, with 3-4 long setae ventrally; hypandrium (Figs 14-15) reduced, consisting of a pair of undulating hypandrial sclerites which are not connected with each other; anterorventrally, these sclerites are articulating with the elongated, apically pointed postgonites; posteriorly, the hypandrial sclerites are connected over a sclerotized bridge; phallapodem dorsally widened; postgonite directed ventrally, parallel-sided, narrow, with a small tooth at tip; aedeagal sheath very large, shoe shaped in lateral view, with a series of wrinkeled, transversal lines.

Female terminalia (Figs 21-23): without modified sclerites; sub-anal plate strongly sclerotized and with at least 4 long, fine setulae, supra-anal plate and sclerites of segment 8 rather indistinctly sclerotized, covered with ordinary setulae, except for one long seta distally of supra-anal plate; 3 sphaerical, dark-brown spermathecae of smooth



Figures 9-15. *Homoneura interstincta* (Fallén), male. 9, abdominal sternites; 10, protandrium; 11, epandrium with surstyli, anterior view; 12, terminalia, lateral view; 13, terminalia, caudal view; 14, hypandrium, aedeagus and associated structures, caudal view; 15, same, lateral view.



Figures 16-20. *Homoneura mediospinosa* sp. n., male. 16, sternite 5, ventral view; 17, same, lateral view; 18, epandrium and surstyli, oblique view; 19, terminalia, lateral view; 20, terminalia, caudal view.

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surface present, with the unpaired spermatheca slightly larger.

Comparison. – H. interstincta is unique in Western Palaearctic Homoneurinae because of the abbreviated row of black spinules on the costa which does not reach R4+5. It differs from superficially similar species in the following points: H. *mediospinosa* sp. n. is generally smaller, has much shorter ocellar setae, frons flat, 5th sternite differently modified and the genital structures are different with 2 black spinulae on the lateral surstylus (see below); species of the H. minor-group have the arista with long rays which are at least twice as long as diameter of base of arista, the medial two rows of acrostichal setulae distinctly enlarged and different genitalia. H. biumbrata (Loew, 1847) has much more and closer-set anteroventral setulae on ctenidium of fore femur. apex of long veins distinctly infuscated and medial 2 rows of acrostichal setulae almost twice as long as 2 lateral rows.

*Distribution.* – Apart from the type series from Sweden, over 150 specimens have been studied from the following countries: Southern France (Vaucluse; MHNG), Northern Germany (Schleswig-Holstein; ZMUC), Northern Italy (Verona province; MHNG) and various cantons in Switzerland (Merz 2003).

*Discussion.* – The species generally known as *H. interstincta* auctt. nec Fallén has no valid name. Its description is given below.

### Homoneura mediospinosa, sp. n.

(Figs 2, 4, 6, 8, 16-20, 24-26)

Homoneura interstincta auctt. nec Fallén, 1820; Collin 1948; Papp 1979; Remm & Elberg 1979; Shatalkin 1995, 2000; Merz 1998.

*Type material.* – HOLOTYPUS  $\circ$ : SWITZERLAND: TI, Gordola, 210 m, 17.V.2000, leg. Merz & Ulrich (MHNG). The specimen is double-mounted on a minuten pin on a polyporus strip and is in very good condition.

PARATYPES: **Bosnia**: 3çç, Tjentiste, 22-25.VII.1984, leg. G. Bächli (CGB, MHNG). **France**: 1♂, Ht. Sav., Bossey-Crévin, 520 m, 27.VII.2000, leg. B. Merz (MHNG). **Ital**y: 2♂♂, 1ç, Liguria, Monterosso a. M. 25.IX.1997, Bach, leg. B. Merz; 1♂, same, 27.IX.1997; 1♂, Lombardia, Marmirolo, Bosco della Fontana, 60 m, 27.VI.2000, leg. B. Merz & F. Mason; 1♂, Veneto, Grezzana, Bellori, 600 m, 2.VII.2000, leg. B. Merz & F. Mason; 1♂, 2çç, Verona, Malchesine, Chiesa S. Michele, 45.46N/10.50E, 26.V.2001, leg. B. Merz & F. Mason (CBM, MHNG). **Kosovo**: 1Q, Pristina,

9-11.IX.1979, leg. G. Bächli (CGB). Liechtenstein: 1Q, Schaan, Schwabbrünnen, 440 m, 7.VIII.1997, leg. B. Merz (MHNG). Romania: 19, O-Karpath, Vaduri, 11.VII.1985, I. Ceianu (published as *H. interstincta* by Ceianu & al. 1991) (CGB). Russia: 10, 10, Caucasus, Mirny [= Mirnyy, Stavropol'skiy Kray], VIII-IX.1981, leg. V. G. Mitrofanov; 10, 10, Gorjatchij Klutch [Čaucasus area], VIII.1979, leg. V. G. Mitrofanov; 200, same, VIII.1981 (CGB, MHNG); 10, Primorskyie Kray, Kamenutschka, 14.VI.1984, leg. A. Shatalkin; 19, same, 13.VII.1983 (CBM). Switzerland: 200, AG, Wettingen, 18.VII.1996, leg. G. Bächli; 1°, AG, Würenlin-gen, 26.VII.1990, leg. G. Bächli; 1°, same, 7.VIII.1998; 40°0°, same, 20.VII.1996; 200, BE, Biel, 27-31.VII.1973, leg. G. Bächli (CGB, MHNG, ZML); 10, BE, Spiez, Spiezberg, 650 m, 29.VI.1993, leg. Merz & Eggenberger (CBM); 200, BL, Bubendorf, 623.54/ 253.54/FF1, 31.VIII.-7.IX.2000, leg. M. Wolf (CGB); 1°, 1°, GE, Cartigny, Moulin de Vert, 350 m, 24.V.1999, leg. Merz & Müller; 10, 200, GE, Chancy, La Laire, 350 m, 486690/111100, 1.VII.2001, leg. B. Merz; 19, GE, Chèvres, bord du Rhône, 26. VIII.2000, Merz & Eggenberger (CBM, MHNG); 1°, GR, San Vittore, Rebberg, 300 m, 4.VIII.1997, leg. B. Merz (CBM); 500, 200, JU, Delémont, 2-6.VIII.1974, leg. G. Bächli (CBM, MHNG, NRS); 1°, SH, Merishausen, Gräte, 520-720 m, 1.VI.1996, leg. Merz & Eggenberger; 1°, SH, Merishausen, Osterberg, 770 m, 30.V.1996, leg. B. Merz; 10°, SH, Rüdlingen, Heimstätte, 380 m, 5.VII.1998, leg. Merz & Eggenberger (CBM); 1°, SO, Rickenbach, 7.VII.1994, Waldrandprojekt, FF Nr. 105, leg. P. Duelli (MHNG); 19, TI, Bellinzona, 26-30.VIII.1981, leg. G. Bächli (CGB); 1Q, TI, Biasca-Loderio, 350 m, 17.V.2000, leg. Merz & Ulrich; 1\si, same, 17.VI.1995, leg. Merz & Bächli; 1\si, same, 28.VI.1992, leg. Merz (CBM, MHNG); 1\si, TI, Brès, 900 m, 19.V.1991, leg. B. Merz (CBM); 1\si, TI, Brissago, 560 m, 17.VI.1997, WaldBrand 97.25, KOM 12.3, leg. M. Moretti (MHNG); 30°0°, 700, TI, Contra, 580 m, 29.VII.1976, Paul H. Arnaud jr. leg.; 200, same, 30.VII.1976 (CAS); 1Q, TI, Gordola, 11.IX.1989, leg. B. Merz; 19, same, 17.V.2000, leg. Merz & Ulrich (CBM, MHNG); 200, VD, Cudrefin, 435 m, 30.VI.1972, Paul H. Arnaud Jr. & Raymond C. Milliet leg. (CAS); 10, ZH, Zürich-Hönggerberg, 530 m, 31.VII.1997, leg. B. Merz; 10, ZH, Zürich, Katzensee, 440 m, 15.VI.1995, leg. B. Merz (CBM, MHNG).

*Other material.* – **Germany**: 1°, Berlin, Grunewald, 15.V.2000, leg. Ch. Kassebeer; 299, Berlin, Köpenick, Müggelberge, 15.VI.1999, leg. Ch. Kassebeer; 1°, Berlin, Köpenick, Müggelberge, 52.25N/13. 38E, 14.V.2000, leg. Ch. Kassebeer (CCK). The specimens from the Müggelberge were published as *H. interstincta* by Kassebeer (2001).

*Diagnosis.* – Small, yellow *Homoneura* with short and weak ocellar setae not reaching anterior fronto-orbital seta, flat frons, almost bare arista, (Fig. 2), 4 rows of evenly short acrostichal setulae, 0+3 dorsocentral setae, a wide-set row of black spines anteroventrally in apical third of fore femur (Fig. 8), slightly infuscated crossveins (Fig. 4) and characteristic male terminalia with the 5th sternite distally with a median projection with black spinose teeth-like setulae at its tip (Figs 16-17), and medially connected with the protandrium by a strong bridge-like sclerite; lateral surstylus distinct, apically with 2 small black spine-like setae (Figs 18-20).

*Description.* – Yellow species of 2.47-2.78 mm wing length in males and 2.64-3.25 mm in females (holotypus: 2.71 mm).

Head (Fig. 2): In profile about 1.2 times as high as wide, gena about one fifth as high as eye; fronto-facial angle about 100°; face almost entirely flat, not visible in profile; frons flat, with few black setulae in anterior third; occiput indistinctly concave medially; head almost entirely mat yellow except for occipital foramen which is black and densely silvery microtrichose; postpedicel about 1.5 times as long as wide; arista with very short rays which are at most as long as basal diameter of arista; chaetotaxy as usual for the genus; all setae black; ocellar setae weak (about as strong as postocellar setae) and short, not reaching anteriorly between anterior fronto-orbital setae; one additional row of black setulae posterior of the row of postocular setae in dorsal half.

Thorax: mat yellow, indistinctly subshining under certain illumination; mesonotum without stripes; 0+3 dorsocentral setae, the anteriormost seta almost on suture; acrostichal setulae in 4 more or less regular rows; setae on medial row slightly longer than on lateral row; proepisternum with a weak to moderately long black seta; prosternum bare; other chaetotaxy as usual for the genus.

Legs: entirely yellow including last tarsal segment; ctenidium on fore femur (Fig. 8) formed by a row of about 7 wide-set, black spinose setulae anteroventrally in apical third; hind femur dorsally with one subapical seta.

Wing (Figs 4, 6): row of black spinules on costa reaching R4+5; both crossveins indistinctly infuscated, wing otherwise entirely translucent; very rarely at tip of veins R2+3, R4+5 and M1+2 with slight infuscation in strongly coloured specimens.

Abdomen: mat yellow, unspotted.

Male terminalia (Figs 16-20): sternite 5 (Figs 16-17) modified, medially with 3 pairs of black spinose setae on a projection; medial part of 5th sternite raised, lateral part flat; ventrally connected with protandrium by a strongly sclerotized bridge; epandrium (Figs 18-20) a large semicercle in caudal view; lateral surstylus projecting posteri-

orly, with 2 small black spinose setae at apex; medial surstylus apically and ventrally with a series of long, soft setulae, which are longer than lateral surstylus in profile; hypandrium forming a semicercle which is closed posteriorly, connected with the aedeagal sheath by a rather large sclerotized plate (postgonite?); phallapodeme dorsally widened; aedeagal sheath shoe-like shaped in lateral view; in caudal view posteriorly widening.

Female terminalia (Figs. 24-26): without apparent modifications; sub-anal and supra-anal plates both posteriorly with at least one long, soft seta; sub-anal plate and cerci black, remaining sternites and tergites yellow; 3 smooth, dark-brown spermathecae present; unpaired spermatheca slightly larger.

*Etymology.* – The specific name refers to the black spinose distal margin of the medial projection of the 5th sternite in the male.

*Comparison.* – *H. mediospinosa* is probably the smallest European *Homoneura* and the only species with a short and weak ocellar seta; the shape of the last pregenital segment is unique among European *Homoneura*. *H. interstincta* has, in addition to the abbreviated row of black spinules on the costa, longer ocellar setae, frons anteriorly with depression, occipital foramen usually not black dorsally, and different male terminalia. Other species with infuscated crossveins have usually longer rays on the arista, setae of ctenidium on fore femur closer-set, and the medial rows of acrostichal setulae distinctly enlarged.

*Literature* (as *H. interstincta*). – Papp 1979 (illustration of antenna and wing), Remm & Elberg 1979 (illustrations of male and female terminalia), Shatalkin 1995 (key), Shatalkin 2000 (key).

*Distribution.* – This species is widely distributed in the Palaearctic region. The following country records of "*H. interstincta* (Fallén)" refer to this species: Great Britain (Collin 1948), Hungary (Papp 1979), Baltic countries (Remm & Elberg 1979).

*Discussion.* – The original description of *S. inter-stincta* is very short and does not allow to recognize the species unambiguously. Therefore it is quite understandable why this species and *H. mediospinosa* have been misidentified in the past. Also, the description of *H. interstincta* in Czerny (1932) is very superficial, and applies to both species. Apparently, it was first Collin (1948) who



Figures 21-26. *Homoneura interstincta* (Fallén) (21-23) and *H. mediospinosa* sp. n. (24-26), female. 21 & 24, last abdominal segments, ventral view; 22 & 25, same, lateral view; 23 & 26, spermathecae.

identified the species with the spinose projection on the 5th sternite as *H. interstincta*, but without studying the types. All subsequent authors have uncritically adopted this incorrect interpretation.

*multipunctata* Fallén, 1820: 30 (*Sapromyza*). HOLOTYPE Q, SWEDEN, Skåne. [not examined]

*Material.* – Described from one Q "species hacc inter nostrates forsitan rarissima, in Scania semel capta". There is only an empty pin with the label "S. multipunctata Q" in Fallén's handwriting in the NRS. No specimen of this species originating from Fallén's collection could be traced in the ZML (R. Danielsson, pers. comm.).

*Identity.* – Fallén described under this name a yellow species with a reticulate wing pattern and yellow antennae. The distribution of the dark spots (along crossveins, at tip of longitudinal veins) and the presence of paler and darker areas apply to a species of Lauxaniidae which is currently interpreted as *Eusapromyza multipunctata* (Fallén). It is known from Skåne ( $30^{\circ}$ ,  $4^{\circ}$ , "Sc [= Scania], Ztt. [= Zetterstedt]" in NRS) whereas other Western Palaearctic species with a reticulate wing do not occur in Scandinavia (*Eusapromyza balioptera* Czerny, *E. beraudi* (Bezzi) and *E. poeciloptera* (Loew)). Because of the unambiguous interpretation of this species by all authors it is not necessary to select a neotype.

*Literature.* – Czerny 1932 (description, key, illustrations wing, fore leg, male terminalia), Remm & Elberg 1979 (illustrations of male and female terminalia), Papp 1979 (key, illustration wing), Shatalkin 2000 (key, illustrations of wing and male terminalia).

*muscaria* Fallén, 1823: 2 (*Heteroneura*). LECTO-TYPE  $\varphi$  (here designated), SWEDEN, Esperöd (by present restriction) (NRS). [examined]

*Material.* – Described from an unspecified number of females from "E. Smolandia a D. Boheman missa. In pratis Esperöd, semel inventa". There is only one female in the collection of Fallén (NRS) which is designated here as lectotype of *Heteroneura muscaria* Fallén and labelled accordingly. It is assumed that this specimen is the one collected by Fallén himself in Esperöd which is the restricted type locality. The condition of this specimen is rather bad (heavily covered with debris on frons and the left side of head and thorax; left wing somewhat folded; right fore leg broken off but lying between middle legs).

*Identity.* – Despite the poor condition of the lectotype its identity can be easily recognized. It is

the species which is currently known in the binomen *Cnemacantha muscaria* (Fallén). The species can be easily recognized by the presence of two apicoventral setae on mid tibia, 1+3 dorsocentral setae, 6 rows of acrostichal setulae and the infuscated wing in the anterior half.

*Literature*. Czerny 1932 (key, description, illustration male terminalia, as *Lyciella muscaria*), Papp 1979 (key, illustration female habitus), Remm & Elberg 1979 (illustrations male and female terminalia), Shatalkin 2000 (key).

*notata* Fallén, 1820: 30 (*Sapromyza*). LECTO-TYPE ○ (here designated), SWEDEN, Esperöd (NRS) [examined].

*Material.* – Described from an unknown number of specimens of both sexes from "habitat rarior, in Esperöd, mense Augusto". There is one couple in the collection of Fallén (NRS), the male with the label "S. notata  $\mathcal{O}$ ", the female with the label "S. notata  $\mathcal{O}$ ", the famile with the label "S. notata  $\mathcal{O}$ ", the famile with the label "S. notata  $\mathcal{O}$ ", both in Fallén's handwriting. The condition of the  $\mathcal{O}$  is good (only left antenna, postpedicel of right antenna, the two anterior left dorsocentral setae and the right posterior scutellar seta missing). It is herewith designated as lectotype of *Sapromyza notata* Fallén and labelled accordingly. The female is labelled as paralectotype.

Identity. - This species belongs to a complex of 4 species of Homoneura which can be separated only in the ornamentation of the hind leg and terminalia of males (Papp 1978). They all have 6 brownish spots on the wing (along both crossveins, at tip of veins R4+5 and M1+2 and two spots on R4+5 between R-M and apical spot), a short plumose arista (entire diameter of arista at least half as wide as width of postpedicel), 4 rows of acrostichal setulae of which the medial pair contains several much longer setulae, and the male carries on the hind femur in posteroventral position a row of 4-15 black, strong setae which are longer and thicker than other setae. The lectotype is characterized by the presence of 7 strong black setae (the longest longer than diameter of hind tibia) in apical half on the hind femur and only 3 fine setulae on hind trochanter. These characters match perfectly the description and the illustrations of Homoneura subnotata Papp, 1978 (see his Fig. 20), of which the holotype could also be studied (in HNHM). Therefore, H. subnotata is a junior synonym of H. notata (syn. n.). As a consequence of this synonymy a new name should be proposed for H. notata auctt. nec Fallén. This species carries a row of 10-15 short black setulae

on hind femur posteroventrally (the longest setula about half as long as diameter of hind tibia) and a brush of black setulae on hind trochanter (Fig. 19 in Papp 1978). Two species are considered to be synonyms of this species: Sapromyza duodecimpunctata Macquart, 1835 and Sapromyza dilecta Rondani, 1868 (Papp 1984b). The types of duodecimpunctata cannot be found in the MNHNP (J. Charbonnel, pers. comm.) and its description is quite short and applies to any species of the species gorup. On the other hand, I could study the lectotype of S. dilecta (in MZF). It corresponds perfectly with the key characters and Fig. 19 in Papp (1978). Therefore the name H. dilecta (Rondani) is proposed for H. notata auctt. nec Fallén.

*Literature.* – (as *S. dilecta*): Rondani 1868 (description); (as *H. subnotata*): Papp 1978 (description and illustrations of male hind leg and male terminalia); Papp 1979 (key and illustrations of male hind leg and male terminalia), Godfrey 1994a (illustration hind leg of male), Shatalkin 1995 (key, illustration of male hind leg), Shatalkin 2000 (key, illustration of male hind leg).

*obsoleta* Fallén, 1820: 31 (*Sapromyza*). LECTO-TYPE ♂ (here designated), SWEDEN, Skåne (presumed, not stated) (NRS). [examined]

*Material.* – Described from an unspecified number of specimens of both sexes without precise type locality ("hospitium sequentis, ejusque similitudo"). Fallén collected often around his home and it is assumed that the specimens originate from Skåne. The collection of Fallén (NRS) contains  $1\sigma$  and  $6\varphi Q$ . The male is unlabelled but in excellent condition (pin with some verdegree, segments 3-5 of right hind tarsus absent). It is designated here as lectotype of *Sapromyza obsoleta* Fallén and labelled accordingly. One  $\varphi$  was missexed by Fallén, because it bears a label in his handwriting "S. obsoleta  $\sigma$ ", another  $\varphi$  is labelled "S. obsoleta  $\varphi$ ", whereas the other 4 specimens are unlabelled.

*Identity.* – According to Fallén (1820), this is the species that Wiedemann considered to be identical with *Tephritis flava* Fabricius, 1805, nec Linnaeus, 1758. The type series consists of 3 species of *Sapromyza*, all with apically darkened postpedicel. The single male was selected as lectotype because it allows to maintain the long-standing usage of the name *obsoleta* for the type species of *Sapromyza*. The diagnostic characters, such as the apically black palpus and postpedicel, the 0+3 dorsocentral setae with few elongate setulae anteriad, the unspotted abdomen, the absence of a dorsal

preapical seta on hind tibia, the very long curved apical spine on hind tibia and the conspicuous brush of black setulae ventrally on hind metatarsus, are unique for Lauxaniids. Accordingly, the 2 labelled QQ and two unlabelled QQ belong to the same species. One Q with yellow palpus, normally setose abdomen and a short, but distinct preapical dorsal seta on hind tibia belongs to *Sapromyza setiventris* Zetterstedt, 1847. The last female has very long setae laterally on tergites 3 & 4 and is *Sapromyza apicalis* Loew, 1847.

*Literature.* – Czerny 1932 (key, description), Collin 1948 (key), Papp 1979 (key, illustration of male hind leg), Shatalkin 2000 (key).

*pallida* Fallén, 1820: 32 (*Sapromyza*). SYNTYPE (without abdomen), SWEDEN, Skåne, Sandhammar (NRS). [examined]

Material. - Described from an unspecified number of specimens of both sexes from "Ad litus Sandhammar [= on the beach of Sandhammar] Scan. mense Augusto, in fruticibus longe frequentissima". There are two specimens in the collection of Fallén in the NRS. One specimen without abdomen labelled "S. pallida  $\circ \circ \circ$  mihi" in Fallén's handwriting is undoubtely a syntype in bad condition (left hind leg absent, left postpedicel missing, left wing partly broken, left anterior orbital seta absent, thorax slightly smashed laterally). The other specimen, a Q, is unlabelled. It is in rather good condition (both postpedicel absent, mesonotum slightly smashed dorsally, legs very compressed) and belongs to Tricholauxania praeusta (Fallén). It is not a syntype, because it differs in some points from the original description. Fallén indicates clearly that the wing is without infuscation ("alisque colore omnino nullo tinctis"), but the specimen has the DM-Cu crossvein and the apex of the wing slightly infuscated. It can be assumed that the postpedicel is yellowish (although they are both absent), as usuby ally in the species, and not "apice late nigro" as observed by Fallén. The ZML holds 5 specimens of *S. pallida* in the "Diptera Scandinavica" collection of Zetterstedt, one specimen in the "Wallengren" collection and one speci-men in the "Göteborgensis" collection. All specimens are in bad condition, partly shrivelled, decoloured and with various parts (setae, antennae, legs) missing. Two specimens of the "Diptera Scandinavica" collection bear a small yellow-brown tag and a label "Ostrog." (= Ostrogothia), the 3 other specimens have only the small yellow-brown triangular tag, suggesting that they may come from the same locality. Therefore they are considered not to be types. The "Wallengren" specimen has the same yellow-brown tag; its head is missing. The "Göteborgensis" specimen is unlabelled and has lost the abdomen. Because of the unsettled origin of the two specimens they are believed not to be types. Six specimens belong to Lyciella affinis (Zetterstedt) as currently understood; only the "Wallengren" specimen is a female of Aulogastromyia anisodactyla (Loew).

Identity. - The single syntype belongs to a species of the Lyciella illota group as currently understood. This group is represented by 3 species in southern Scandinavia: L. illota (Loew, 1847), L. mihalvii Papp, 1978 and L. subfasciata (Zetterstedt, 1847). They are characterized by the contrastingly black tip of palpus and postpedicel, the entirely transparent wing without infuscation, the biserial acrostichal setulae, 1-2 additional setulae close to posterior notopleural seta, the presence of 2 katepisternal setae, the mat to subshining mesonotum and unmodified legs. The 3 species differ only in the structure of the male terminalia (length and shape of surstylus, shape of gonites). Unfortunately, these characters are not visible in the syntype. It is therefore impossible to identify the specimen, although the sum of character states (only apical third of postpedicel black, mesonotum mat) suggests that it belongs to L. subfasciata. However, this identification is vague and it is proposed here not to change a well established name. S. pallida should be treated as an unrecognized species as long as no male syntype is available.

## *pallidiventris* Fallén, 1820: 31 (*Sapromyza*). LEC-TOTYPE ♂ (here designated), SWEDEN, Svecia meridionalis (NRS). [examined]

*Material.* – Described from an unspecified number of specimens of both sexes from "in Svecia meridionali [= Southern Sweden] mense Augusto obvia." There are 8 specimens in the Fallén collection (NRS) which are considered to be syntypes. One male with a label "S. pallidiventris  $\sigma$ " in Fallén's handwriting, in excellent condition (left postpedicel absent and left occiput slightly depressed), is selected here as lectotype of *Sapromyza pallidiventris* Fallén and labelled accordingly. One female is labelled "S. pallidiventris  $\varphi$ " in Fallén's hand-writing, whereas the other  $3\sigma\sigma$  and  $3\varphi\rho$  are unlabelled. They are paralectotypes of *S. pallidiventris*.

*Identity.* – This species belongs to a group of 5 very similar species which are either placed in *Lyciella* Collin, 1948, or in *Pseudolyciella* Shatalkin, 2000. They are characterized by the absence of anepimeral setulae, the presence of 1+3 dorsocentral setae which are inserted on black spots and the characteristically large surstyli with highly modified gonites. They are divided into two species groups, the exclusively mediterranean *L. brevimana* group which has the mesonotum mostly yellowish, and the more widespread *L. pallidiventris* group with the predominantly grey mesonotum. The latter includes also *L. stylata* Papp, 1978 and *L. subpallidiventris* Papp, 1978.

The 3 species can be properly separated only by the study of the gonites of the male terminalia (Papp 1978). The lectotype corresponds with the current usage of the name (Godfrey 1994b, Merz 1998, Papp 1978, 1979, Shatalkin 2000) and is therefore selected as name-bearing type in order to stabilize nomenclature. Another male without labels belongs to the same species. One male without labels has a very long left gonite and is *L. stylata*. In the 4th male the gonites are short and apically curved in different directions. It is identified as *L. subpallidiventris*. The holotypes of both species described by Papp (1978) (*stylata, subpallidiventris*) have been studied (in HNHM).

*Literature.* – Papp 1978 (illustrations male terminalia), Papp 1979 (key, illustration male terminalia), Remm & Elberg 1979 (illustration 27e: male terminalia) Godfrey 1994b (illustration male terminalia), Shatalkin 2000 (key, illustration male terminalia).

*plumicornis* Fallén, 1820: 33 (*Sapromyza*). LEC-TOTYPE Q (here designated), SWEDEN, Skåne (presumed, not stated) (NRS). [examined]

Material. - Described from an unspecified number of  $\circ \circ$  and  $\varphi \varphi$ , without indication of type locality "habitat cum praecedente" [= Sapromyza quadripunctata (Linnaeus, 1758) which has the following distribution: "In succo arborum sauciatarum mense Julio, in praedio Beckaskog & in fruticibus ad litus Sandhammar Scan. lecta"]. It is assumed thus that the 2 syntypes of Fallén (NRS) were collected in Skåne. One female with the handwritten label of Fallén "S. plunicornis o" was mis-sexed by Fallén. It is here designated as lectotype of Sapromyza plumicornis Fallén and labelled accordingly. It is in rather bad condition (both aristae, 3 scutellar setae, left fore leg, tarsus of right fore leg, left mid tarsus and some scutal setae around the pin missing, body partly covered with debris). The other female with the label "S. plumicornis Q" in Fallén's handwriting is in worse condition and labelled as paralectotype.

*Identity.* – Despite the poor condition of the lectotype, the diagnostic characters are mostly well visible (yellow body, presence of an intraalar seta, of 0+3 dorsocentral setae, black palpus, yellow antenna, scutellum ventrally uniformly yellow, abdomen unspotted, tergite 3 at posterior margin with very long black setae). The designation of this specimen as lectotype of *Sapromyza plumicornis* Fallén maintains its long-standing usage in the genus *Minettia*. Although the aristae are missing in the lectotype there is no doubt about its identity. It is the only yellow Scandinavian *Minettia* with unpatterned wings and entirely yellow scutellum. Moreover, it resembles superficially *Sapromyzosoma quadripunctata* (Linnaeus, 1758) with which it is compared in the original description. The paralectotype female belongs to the same species.

*Literature.* – Czerny 1932 (description, key), Papp 1979 (key), Remm & Elberg 1979 (illustrations male and female terminalia), Papp 1981 (key), Shatalkin 1998 (key, illustration male terminalia), Shatalkin 2000 (key, illustration male terminalia).

*praeusta* Fallén, 1820: 31 (*Sapromyza*). LECTO-TYPE ♂ (here designated), SWEDEN, Skåne (presumed, not stated) (NRS). [examined]

*Material.* – Described from an unspecified number of  $\bigcirc \bigcirc$  and  $\circlearrowright \bigcirc$  from "in hortis mense Augusto". It is assumed here that Fallén collected this species around his home in Skåne which is considered to be the type locality. The collection (NRS) holds 11 syntypic specimens. One male bears the label "S. praeusta  $\bigcirc$ " in Fallén's handwriting. It is in good condition (covered with some debris, both medial vertical setae and left postpedicel missing) and is herewith designated as lectotype of *Sapromyza praeusta* Fallén. The other 50° and 5° (one  $\bigcirc$  with the label "S. praeusta  $\bigcirc$ " in Fallén's handwriting) are considered to be paralectotypes and are labelled accordingly.

*Identity.* – This is an easily recognizable species by the row of setulae ventrally on R2+3, the distinctly infuscated DM-Cu and apex of wing, the ctenidium of about 15 black setulae in apical quarter on fore femur anteroventrally, the yellow antenna and the black palpus. The male has a small black brush of black setulae at ventral tip of hind tibia. The lectotype corresponds perfectly with this description and fixes the long-standing usage of the name praeusta in the binomen Tricholauxania praeusta (Fallén, 1820). The labelled female, 40°0° and 1Q without labels belong to the same species. The other 4 specimens belong to 3 other species: Two females are Lyciella affinis (Zetterstedt, 1847), one or is Lyciella rorida (Fallén, 1820) and one Q Sapromyzosoma quadripunctata (Linnaeus, 1758).

*Literature.* – Czerny 1932 (description, illustration wing), Collin 1948 (key), Papp 1979 (key, illustrations of head and wing), Remm & Elberg 1979 (illustrations male and female terminalia), Remm 1991 (illustrations male hind leg, terminalia), Shatalkin 2000 (key).

*rorida* Fallén, 1820: 32 (*Sapromyza*). LECTO-TYPE ♂ (here designated), SWEDEN, Skåne (presumed, not stated) (NRS). [examined] *Material.* – Described from an unspecified number of  $\sigma\sigma$  and  $\varsigma\varphi$  from "in fruticibus mense Julio nuptias celebrans". It is assumed here that Fallén collected this species around his home in Skåne which is considered to be the type locality. There are 10 syntypic specimens in the collection (NRS). One male without labels but in very good condition (only left posterior fronto-orbital seta absent and body slightly covered with debris) is designated herewith as lectotype of *Sapromyza rorida* Fallén and is labelled accordingly. One specimen carries the label "S. rorida  $\sigma$ " in Fallén's handwriting, but it is a female. Another  $\varphi$  is labelled "S. rorida  $\varphi$ " in Fallén's handwriting, and the other 7 specimens are unlabelled.

Identity. - The original description of Fallén is very general and applies to several yellow species with entirely transparent wings. In fact, the syntypic series consists of 5 species of 3 genera of Lauxaniidae and 1 species of Chyromyidae. The male which is selected here as lectotype is unlabelled, but it has the tip of the aedeagus exposed (with 2 arrow-like sclerotized spines in the membrane) and its designation maintains the longstanding usage of the name S. rorida for a species of Lyciella as currently understood. Both labelled and 3 unlabelled 99 belong to the same unmistakable species (4 rows of acrostichal setulae anterior of suture, setulae present between apical scutellar setae, ctenidium on fore femur composed of about 7 spiny black setulae anteroventrally in apical third, 2 katepisternal setae, antenna and palpus yellow). One female has the mesonotum entirely shining and the palpus is black. It belongs to Lyciella decipiens (Loew, 1847). Another female without presutural dorsocentral seta, the bases of the ocellar setae outside the triangle formed by the ocelli and with 4 rows of acrostichal setulae is Sapromyzosoma quadricincta (Becker, 1895). One male has a distinct intraalar seta, very long aristal rays, black palpus and an unspotted abdomen. It is Minettia plumicornis (Fallén). The last female is a species of *Chyromya* Robineau-Desvoidy (Chyromyidae).

*Literature.* – Czerny 1932 (description), Papp 1979 (key, illustrations of habitus and fore leg), Remm & Elberg 1979 (illustrations of male and female terminalia), Shatalkin 2000 (key, illustration of male terminalia).

*seticornis* Fallén, 1820: 27 (*Lauxania*). LECTO-TYPE  $\varphi$  (here designated), SWEDEN, Uppland (by present restriction) (NRS). [examined].

*Material.* – Described from an unspecified number of or and qq from "Habitat in Uplandia D[omo] Haeffner;

in Ostrogothia D[omo] Zetterstedt". The Fallén collection (NRS) contains 2 99 which are probably syntypes. One female is labelled "Lauxania seticornis O" in Fallén's handwriting. Fallén obviously missexed the specimen because he considered the two sexes to be very similar ("masculum a femina mox distinguunt"). It has the characteristic slightly pointed tip of the abdomen which is very different from the large, ventrally folded epandrium of the  $\sigma$ . The condition of the specimen is rather bad (both postpedicels missing, head and thorax laterally covered with debris, pin with verdegree; pinned laterally, thus scutum well visible, colouration good, all setae and all legs present). It is designated and labelled here as lectotype of Lauxania seticornis Fallén. The other specimen is a female without labels. I have labelled it as paralectotype.

Identity. - Both specimens belong to the same species. The present lectotype fixation maintains the long-standing usage of the name Lauxania seticornis Fallén which is the type-species of Pachycerina Macquart, 1835. It is a very characteristic yellow-brownish species with the following set of characters: face convex with two shining black round spots laterally, ocellar triangle small and shining black, arista thickened due to very dense blackish setulae, anterior fronto-orbital seta inclinate, posterior reclinate, palpus apically black, wing yellow with crossbands slightly infuscated.

Literature. - Czerny 1932 (description, key, illustration of head), Papp 1979 (key, illustration of habitus), Remm & Elberg 1979 (illustrations of male and female terminalia), Shatalkin 2000 (key)

#### Nomenclatural summary

Calliopum aeneum (Fallén, 1820) Cnemacantha muscaria (Fallén, 1823) Eusapromyza multipunctata (Fallén, 1820) Homoneura dilecta (Rondani, 1868) = *H. notata* auctt. nec Fallén, 1820 Homoneura interstincta (Fallén, 1820) Homoneura mediospinosa, sp. n. = H. interstincta auctt. nec Fallén, 1820 Homoneura notata (Fallén, 1820) = *H. subnotata* Papp, 1978, **syn. n.** Lyciella decempunctata (Fallén, 1820) Lyciella pallidiventris (Fallén, 1820) Lyciella rorida (Fallén, 1820) Minettia fasciata (Fallén, 1826) Minettia plumicornis (Fallén, 1820) Pachycerina seticornis (Fallén, 1820) Sapromyza albiceps Fallén, 1820 Sapromyza obsoleta Fallén, 1820 Tricholauxania praeusta (Fallén, 1820)

Nomen dubium: Sapromyza pallida Fallén, 1820

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